

Application No. 10/585,697

Response to Notice of Non-Compliant Amendment Dated March 16, 2011

Reply to Office Action Dated October 5, 2010 and

Notice of Non-Compliant Amendment Dated March 9, 2011

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1.-34. (Cancelled)

Claim 35 (Currently Amended) A queue management system for managing access to a plurality of services for a group of people having a mobile personal communicator, and for controlling the movement of a~~the~~ group of one or more people through a virtual queue ~~lines~~ for a service~~said services~~, comprising:

a registration means~~pack~~ for registering the group with the system, the registration ~~means~~pack comprising an information carrier and ~~at least one~~ a set of ID tag elements, in which a respective tag element is supplied for the~~each~~ member(s)~~member~~ of the group, the information carrier bearing a registration code and the ~~at least one~~ ID tag elements comprising portable tabs respectively including ID details~~values~~ for identifying the ~~member(s)~~members of the group, the registration ~~means~~pack further associating the registration code with an indication of group size and uniquely with the ID ~~details~~values;

interface means for enabling communications to and from the group~~with the personal communicator through a mobile telephone network~~;

a processor associated~~coupled~~ with the interface means ~~and responsive to a communication from the group~~to receive communications from the personal communicator via the mobile telephone network, the processor being responsive to a said communication including a communicator address and the registration code for generating a registration record for the group representing the group size, the ID details~~values~~ and the communicator address;

means for storing the registration record;

the processor being responsive to a further said communication from the group requesting access to the virtual queue~~personal communicator specifying the selection of a respective service amongst the plurality of services to enter the group into the~~ a virtual queue for the respective service and

Application No. 10/585,697

Response to Notice of Non-Compliant Amendment Dated March 16, 2011

Reply to Office Action Dated October 5, 2010 and

Notice of Non-Compliant Amendment Dated March 9, 2011

thereafter to monitor the place of the group in the virtual queue line and to trigger a summons signal when the group approaches or reaches the head of the virtual queue line;

the interface means being responsive to the summons signal for initiating a communication to the personal communicator ~~address~~ for summoning the group to the respective service; and

access control apparatus at the respective service ~~for reading the at least one~~ responsive to presentation of the ID tag elements for reading each respective ID tag element and for comparing the ID ~~details~~ values with the registration record in order to evaluate whether access to the respective service should be permitted or prevented.

Claim 36 (Cancelled)

Claim 37 (Currently Amended) A queue management system according to claim 35, in which ~~the at least one~~ each ID tag element comprises a portable ~~tab or band~~ wristband.

Claim 38 (Currently Amended) A queue management system according to claim 35, in which ~~the at least one~~ each ID tag element includes a member bearing a scannable code.

Claim 39 (Cancelled)

Claim 40 (Cancelled)

Claim 41 (Previously Presented) A queue management system according to claim 35, in which the information carrier is a card and the registration code is an alphanumeric value.

Claim 42 (Cancelled)

Claim 43 (Cancelled)

Application No. 10/585,697

Response to Notice of Non-Compliant Amendment Dated March 16, 2011

Reply to Office Action Dated October 5, 2010 and

Notice of Non-Compliant Amendment Dated March 9, 2011

Claim 44 (Currently Amended) A queue management system according to claim 35, ~~in which the comprising registration means comprise~~ at least one registration station.

Claim 45 (Currently Amended) A queue management system according to claim 35, further comprising a ~~personal communicator~~ mobile telephone for the communication of audio or visual messages between the group and the interface means.

Claim 46 (Previously Presented) A queue management system according to claim 35, in which the processor is arranged to track the progress of the group through the virtual queue line by periodically noting the reduction in the number of people in the virtual queue line ahead of the group.

Claim 47 (Previously Presented) A queue management system according to claim 35, in which the processor comprises means for calculating a movement forward for the virtual queue and is arranged to track the progress of the group through the virtual queue line by periodically calculating a value representing the movement forward.

Claim 48 (Previously Presented) A queue management system according to claim 35, in which the processor comprises means responsive to receipt of the further communication for initiating a timing period, means for calculating a queuing time starting from the beginning of the timing period, and means for generating an indication of an expected service entry time for the group based on a calculated value representing the queuing time.

Claim 49 (Previously Presented) A queue management system according to claim 47, in which the processor comprises a memory for storing a service throughput profile, and in which the calculating means calculates the calculated value based on the stored service throughput profile.

Claim 50 (Previously Presented) A queue management system according to claim 49, in which the service throughput profile is based on records of previous use of the service.

Application No. 10/585,697

Response to Notice of Non-Compliant Amendment Dated March 16, 2011

Reply to Office Action Dated October 5, 2010 and

Notice of Non-Compliant Amendment Dated March 9, 2011

Claim 51 (Previously Presented) A queue management system according to claim 49, further comprising monitoring apparatus for monitoring an actual service throughput, and in which the processor is arranged to receive information from the monitoring apparatus for updating the stored service throughput profile.

Claim 52 (Previously Presented) A queue management system according to claim 47, in which the calculating means performs calculations repeatedly as the group progresses through the virtual queue and repeatedly updates the calculated value.

Claim 53 (Previously Presented) A queue management system according to claim 35, in which the virtual queue line is combined with a physical queue line and in which the processor is arranged to monitor the place of the group in the overall queue line.

Claim 54 (Currently Amended) A queue management system according to claim 35, further comprising means for storing an itinerary for the group representing visits for ~~at~~the plurality of services, and in which the processor is arranged to process and manage the itinerary for the group.

Claim 55 (Previously Presented) A queue management system according to claim 54, further comprising a plurality of itinerary management stations in communication with the processor for enabling the group to create, modify and input the itinerary.

Claim 56 (Cancelled)

Claim 57 (Currently Amended) A method of queue management for ~~controlling the movement of~~managing access to a plurality of services for a group of one or more people having a mobile personal communicator and for controlling the movement of the group through a virtual queue line~~lines~~ for a ~~service~~said services, comprising the steps of:

assigning to the group a registration pack, the registration pack comprising an information carrier and ~~at least one~~ a set of ID tag elements respectively for the ~~member(s)~~ each member of the group, the information carrier bearing a registration code and the ~~at least one~~ ID tag elements comprising portable tabs respectively including ID ~~details~~ values for identifying the ~~member(s)~~ members of the group;

associating the registration code with an indication of group size and uniquely with the ID details values;

communicating with the personal communicator through a mobile telephone network, including receiving communications from and sending communications to the personal communicator via the mobile telephone network, and:

in response to a said communication from the ~~group~~ personal communicator including a communicator address and the registration code, registering the group with the system by generating and storing a registration record for the group representing the group size, the ID details values and the communicator address;

in response to a further said communication from the ~~group for access to the virtual queue~~ personal communicator specifying the selection of a respective service amongst the plurality of services, assigning the group a place in ~~the~~ a virtual queue for the respective service and thereafter monitoring the place of the group in the virtual queue line and triggering a summons signal when the group approaches or reaches the head of the virtual queue line;

in response to the summons signal, initiating a said communication to the personal communicator ~~address~~ for summoning the group to the respective service; and

at the respective service in response to the presentation of the ID tag elements; reading ~~the~~ at least one each respective ID tag element and comparing the ID details values with the registration record in order to evaluate whether access to the respective service should be permitted or prevented.

Claim 58 (Cancelled)

Application No. 10/585,697

Response to Notice of Non-Compliant Amendment Dated March 16, 2011

Reply to Office Action Dated October 5, 2010 and

Notice of Non-Compliant Amendment Dated March 9, 2011

Claim 59 (Currently Amended) A method of queue management according to claim 57, comprising providing ~~the at least one~~each ID tag element with a scannable code.

Claim 60 (Cancelled)

Claim 61 (Cancelled)

Claim 62 (Cancelled)

Claim 63 (Currently Amended) A method of queue management according to claim 57, in which the step of assigning ~~at least one~~taga registration pack includes generating the ~~at least one~~ ID tag elements~~through a computer recognition process.~~

Claim 64 (Cancelled)

Claim 65 (Previously Presented) A method of queue management according to claim 57, in which the step of monitoring comprises tracking the progress of the group through the virtual queue line by periodically noting the reduction in the number of people in the virtual queue line ahead of the group.

Claim 66 (Previously Presented) A method of queue management according to claim 57, in which the step of monitoring comprises tracking the progress of the group through the virtual queue line by periodically calculating a value representing movement forward for the virtual queue.

Claim 67 (Previously Presented) A method of queue management according to claim 57, comprising the steps of: in response to receipt of the further communication initiating a timing period, calculating a queuing time starting from the beginning of the timing period, and generating an indication of an expected service entry time for the group based on a calculated value representing the queuing time.



Application No. 10/585,697

Response to Notice of Non-Compliant Amendment Dated March 16, 2011

Reply to Office Action Dated October 5, 2010 and

Notice of Non-Compliant Amendment Dated March 9, 2011

Claim 68 (Previously Presented) A method of queue management according to claim 66, comprising storing a service throughput profile, and calculating the queuing time based on the stored service throughput profile.

Claim 69 (Previously Presented) A method of queue management according to claim 68, in which the service throughput profile is based on records of previous use of the service.

Claim 70 (Previously Presented) A method of queue management according to claim 68, comprising receiving information concerning an actual service throughput from the service for updating the stored service throughput profile.

Claim 71 (Previously Presented) A method of queue management according to claim 67, further comprising performing calculations repeatedly as the group progresses through the virtual queue and repeatedly updating the calculated value.

Claim 72 (Previously Presented) A method of queue management according to claim 57, in which the virtual queue line is combined with a physical queue line and comprising monitoring the place of the group in the overall queue line.

Claim 73 (Previously Presented) A method of queue management according to claim 57, further comprising storing an itinerary for the group representing visits to a plurality of services, and processing and managing the itinerary for the group.

Claim 74 (Cancelled)